



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/749,406	01/02/2004	Shuji Ono	3562-0134P	2849
2292 7590 07/02/2007 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			EXAMINER RASHIDIAN, MOHAMMAD M	
			ART UNIT 2609	PAPER NUMBER
			NOTIFICATION DATE 07/02/2007	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary

Application No.

10/749,406

Applicant(s)

ONO, SHUJI

Examiner

Mehdi Rashidian

Art Unit

2609

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 January 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 1/2/2004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION***Claim Objections***

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details. The abstract submitted exceeds 150 words in length.

The drawings are objected to because the word "DREATER" in figure 5 element S340 "THE NUMBER OF DIFFERENCES THAT DEGREE OF COINCIDENCE IS DREATER THAN REFERENCE VALUE IS MORE THAN REFERENCE NUMBER?" is vague. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figure appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 2 applicant states "The authentication apparatus as claimed in claim 1, wherein said image pickup unit takes an animated image of the user, said memory supplies an animated image of the user who brings into said predetermined action to said authentication unit, said authentication unit certifies said user by comparing said user's movement in the animated image taken by the image pickup unit and ***said user's movement*** in the animated image acquired from the memory. ", ***said user's movement*** without prior definition of "***user's movement***" thus causing indefinite introduction of terms as relation to the invention.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claims 1-3 are rejected under 35 U.S.C. 102(e) as being anticipated by Sukegawa et al. (US Patent 7,120,278) henceforth referred to as Sukegawa.

Regarding **claim 1**, "an authentication apparatus for certifying a user using a picture registered in a memory," reads on Sukegawa (column 8, lines 56-67), "an image pickup unit for taking the picture of the user" reads on Sukegawa (figure 3, elements 3

Art Unit: 2609

and 9, and column 9, lines 28-31), "an authentication unit" reads on Sukegawa (figure 4, element S22, and column 18, lines 12-27), "for certifying the user by letting said user to bring into a predetermined action and comparing said user's picture taken by said image pickup unit when said user brings into the predetermined action and the picture registered in said memory" reads on Sukegawa (column 4, lines 63-67 and column 5, lines 20-25).

Regarding **claim 2**, "the authentication apparatus as claimed in claim 1, wherein said image pickup unit takes an animated image of the user" reads on Sukegawa (column 34, lines 9-17), "said memory supplies an animated image of the user who brings into said predetermined action" reads on Sukegawa (column 34, lines 9-17), "to said authentication unit, said authentication unit certifies said user by comparing said user's movement" reads on Sukegawa (column 34, lines 9-17), "in the animated image taken by the image pickup unit and said user's movement in the animated image acquired from the memory" reads on Sukegawa (column 34, lines 9-17).

Regarding **claim 3**, "the authentication apparatus as claimed in claim 2, wherein said image pickup unit takes an animated image of head shot of said user" reads on Sukegawa (column 34, lines 10-15), "said memory supplies an animated image of head shots of said user to said authentication unit, said authentication unit certifies said user by comparing a movement of the head shots" reads on Sukegawa (column 35, lines 37-52), "taken by the image pickup unit and a movement of the head shots acquired from the memory" reads on Sukegawa (column 35, lines 37-52) .

Claims 1,4-8, and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Chen et al. (US Patent 5,761,329) henceforth referred to as Chen.

Regarding **claim 1**, "an authentication apparatus for certifying a user using a picture registered in a memory," reads on Chen (figure 1 and figure 4 elements 4,100, 124, column 2, lines 6-14, Claim 15), "an image pickup unit for taking the picture of the

Art Unit: 2609

user” reads on Chen (figure 4 element 4, column 3, lines 17-21), “an authentication unit” reads on Chen (figure 4 elements 100 and 124, column 3, lines 21-31), “for certifying the user by letting said user to bring into a predetermined action and comparing said user’s picture taken by said image pickup unit when said user brings into the predetermined action and the picture registered in said memory” reads on Chen (figure 1, figure 4 elements 4,104,110,132, column 1, lines 29-31, column 3, lines 21-31, claim 1).

Regarding **claim 4**, “the authentication apparatus as claimed in claim 1” reads on Chen (column 3 lines 18-31), “further comprising a registration information acquiring unit for acquiring a voice of said user” reads on Chen (figure 1 element 103, and figure 4, column 2 lines 32-37), “and the head shot of said user corresponding to said voice from said memory” reads on Chen (figure 1, and figure 4, column 2 lines 17-21) “wherein said image pickup unit takes the head shots of said user, and said authentication unit certifies said user by comparing the head shots of said user taken by the image pickup unit and the head shots acquired from the memory” reads on Chen (column 3, lines 18-31 and claim 1).

“when a degree of coincidence between a voice newly uttered by said user and the voice acquired from said memory satisfies a predetermined reference” reads on Chen (claim 1).

Regarding **claim 5**, “the authentication apparatus as claimed in claim 4, wherein said memory holds the animated image of the head shots” reads on Chen (figure 4 elements 4,100 and 110, and claim 12), “when said user has uttered said voice” reads on Chen (claims 1 and 12), “said image pickup unit takes the head shots of said user as the animated image” reads on Chen (figure 4, element 4), “when said voice has been uttered, and said authentication unit certifies said user by comparing the animated image acquired from the memory and the animated image taken by the image pickup unit” reads on Chen (figure 4, and Claims 1 and 15).

Art Unit: 2609

Regarding **claim 6**, “the authentication apparatus as claimed in claim 5, further comprising a microphone for newly acquiring the voice that said user utters reads on Chen (figure 4 element 10, and claim 15), “wherein said authentication unit certifies said user by respectively selecting frame pictures at the time that the user utters the same voice out of the animated image acquired from the memory and the animated image taken by the image pickup unit using the voice acquired from said memory and the voice acquired by said microphone, and comparing the selected frame pictures” reads on Chen (claims 1 and 15).

Regarding **claim 7**, “the authentication apparatus as claimed in claim 6, wherein said authentication unit certifies said user by selecting a plurality of combinations of the frame pictures at the time that the user utters the same voice out of the animated image acquired from the memory and the animated image taken by the image pickup unit, and comparing the selected plurality of combinations of the frame pictures respectively” reads on Chen (claim 14, lines 12-22).

Regarding **claim 8**, “the authentication apparatus as claimed in claim 7, wherein said authentication unit” reads on Chen (claim 14), “includes a synchronization unit for synchronizing each frame picture of the animated image acquired from the memory with the respective frame pictures at the time that the user utters the same voice in the animated image taken by said image pickup unit using the voice acquired from said memory and the voice acquired by said microphone” reads on Chen (column 2, lines 14-21, and claim 14), “and certifies said user by comparing the synchronized frame pictures” reads on Chen (column 2, lines 14-21, and claim 14).

Regarding **claim 11**, “the authentication apparatus as claimed in claim 4, wherein said memory stores head shots at the time that said user does not utter the voice, said image pickup unit takes the head shots at the time that said user does not utter the voice” reads on Chen (claim 14), “and said authentication unit certifies said user by comparing the head shots acquired from said memory and the head shots taken by said

Art Unit: 2609

image pickup unit at the time that said user does not utter the voice” reads on Chen(claim 14). Examiner notes that “said user does not utter the voice” is a selected phrase as referred to claim 14 of Chen, thus this claim reads on cited prior art.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen as applied to claim 4-8 above, and further in view of Sukegawa .

Regarding **claim 9**, “the authentication apparatus as claimed in claim 5, wherein said authentication unit certifies said user by selecting a plurality of frame pictures at the time that the user utters the same voice out of each of the animated image acquired from the memory and the animated image taken by the image pickup unit” reads on Chen (figure 4 elements 100 and 104, and claim 12 and 14), however Chen is silent about “comparing a difference between the plurality of frame pictures selected out of the animated images acquired from said memory and a difference between the plurality of frame pictures selected out of the animated images taken by said image pickup unit, and comparing the movements of said user’s face”. In the same field of endeavor, however, Sukegawa discloses, “comparing the movements” in (column 35, lines 5-29 and lines 53-58).

It would have been obvious to one of ordinary skill in the art at the time of invention to combine teachings of Chen with disclosure of Sukegawa for the purpose of improving accuracy of authentication apparatus.

Regarding **claim 10**, "the authentication apparatus as claimed in claim 9, wherein said authentication unit certifies said user by respectively cutting a mouth of said user from the plurality of frame pictures, calculating and comparing the plurality of the differences of the cut user's mouth, and comparing a movement of the user's mouth in the animated image acquired from said memory" reads on Chen (figures 2 –3, Claims 4-6), however Chen is silent about "and a movement of the user's mouth in the animated images taken by said image pickup unit". In the same field of endeavor, however, Sukegawa discloses, "comparing the movements" in (column 35, lines 5-29 and lines 53-58).

It would have been obvious to one of ordinary skill in the art at the time of invention to combine teachings of Chen with disclosure of Sukegawa for the purpose of improving accuracy of authentication.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Barube et al. (US Patent 7,130,454)

Art Unit: 2609

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mehdi Rashidian whose telephone number is (571) 272-9763. The examiner can normally be reached on Mon-Thu 7:30AM to 6:00PM, ESP. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Pendleton can be reached on (571) 272-7527. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MMR



BRIAN TYRONE PENDLETON
PRIMARY EXAMINER